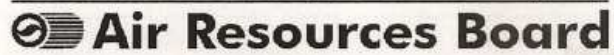


California Environmental Protection Agency



## Air Resources Board

### Low Carbon Fuel Standard Program System Development Project Project Management Plan

January 12, 2010

**APPROVAL:**

Renee Littaua, ARB Project Manager

Signature Renee J. Littaua Date 1/12/2010

Cindy Stover, FCCC Project Director

Signature [Signature] Date 1/12/10

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## **I. Project Summary**

This document provides a preliminary project management framework for the LCFS System Development Project. This framework is intended to add rudimentary project management controls to better manage the project through completion. The LCFS System Development Project faces critical timelines; therefore, the project scope is reduced to the development, testing and deployment of regulated parties facing pages. Project management activities within this plan are intended to facilitate these system development activities to completion, and without adding undue project management activities. The PMP adds Project Management advisors to establish project management practices and to mentor existing FCCC and ARB staff in the use of these practices.

### **A. Background**

The Low Carbon Fuel Standard (LCFS) System Development project was initiated by the Stationary Source Division (SSD) on January 15, 2009 to fulfill proposed regulatory requirements to provide an information technology system for regulated party reporting on fuels and other data. Regulated parties that are upstream entities (i.e., producers and importers that are legally responsible for the quality of transportation fuels in California) are required to report on fuel carbon intensity values for their fuels, along with the total energy content of each low carbon fuel component replacement for either gasoline or diesel on a quarterly and annual basis. Reporting is to occur via a secure, web-based system through direct data entry and/or an XML upload of data. System functionality includes credit tracking functionality to maintain credits/deficits calculated from submitted fuel data. The system is to securely maintain and report credit/deficit status for each regulated party. Key project milestones include:

- ♦ Quarterly progress reporting to begin in 2010 – the first report is due May 31st, 2010 and quarterly thereafter.
- ♦ Annual compliance reporting by April 30th starting in 2012 for calendar year 2011

The system development project includes a second phase to develop and deploy credit Bank and Trading System (BTS) functionality to enable regulated parties to track their LCFS credit balance and credit trades. The BTS will securely maintain a credit trading history for each regulated party. Key milestones for this second project phase include:

- ♦ 2010 – Construct and Test Bank and Trading System
- ♦ January 2011 – Deploy BTS in the production environment
- ♦ April 1, 2011 – Deploy BTS for regulated parties active use for credit buy/sell transactions

This project management plan (PMP) details the ARB and FCCC supporting activities, roles and responsibilities, and timelines to complete system development activities and to deploy LCFS Regulated Parties facing pages within the timeline detailed within this PMP.

## B. Scope

This project includes the completion of key system development activities to complete development of and deploy LCFS system regulated parties facing pages, which provide the external user with the ability to:

- ♦ Enter corporation and company profile data
- ♦ Establish user accounts
- ♦ Enter fuel transaction data
- ♦ Edit entered fuel transaction data to the point of submission

Out of scope activities include:

- ♦ Design, development and deployment of LCFS system ARB facing pages and related data submission approval, edit, and reporting capability.
- ♦ Design, development, and deployment of the LCFS Bank Trading System functionality.

## C. Project Deliverables

This Project Management Plan (PMP) is the first of eight deliverables for this effort, to include:

Deliverable	Estimated Delivery Date
<b>Project Management Plan.</b> This deliverable includes the development and maintenance of the PMP, ongoing project management and reporting, as well as quality and risk management.	January 7, 2010
<b>LCFS system Implementation Plan.</b> The completion of an implementation plan which details activities required to move the LCFS system from the test to the production environment.	January 8, 2010
<b>LCFS system Test Plan.</b> Documents the strategy that will be used to verify and ensure that the LCFS system meets its design specifications and other requirements.	January 12, 2010
<b>LCFS system Test Scripts.</b> The completion multiple test scripts which provide a set of instructions that will be performed on the LCFS system to test that the system functions as expected.	January 21, 2010

Deliverable	Estimated Delivery Date
<b>Hardware Installation and Configuration.</b> Includes activities to acquire, install, and configure hardware.	January 26, 2010
<b>System Backup.</b> This document defines the system back-up and maintenance requirements for all environments, assigns responsibilities for and implements related activities.	January 19, 2010
<b>Configuration Management.</b> This document defines the requirements and processes for configuration management for each environment.	January 19, 2010
<b>LCFS Reporting Tool Working Group Meeting System Demonstration.</b> Planning for and conduct of a system demonstration at the Working Group Meeting.	January 21, 2010
<b>Help Desk Procedures.</b> Establishes a point of contact, communication processes, and escalation procedures.	January 26, 2010
<b>User Acceptance Testing.</b> Includes the planning, coordination, preparation of materials, conduct of UAT, and documentation of tester results.	January 29, 2010
<b>System Deployment.</b> Go-live date when the system is made available to industry users.	February 1, 2010
<b>LCFS system Training Plan.</b> The completion of a plan which describes the key decisions, tasks, and resources needed to develop a strategy for delivering training for a project.	February 8, 2010
<b>Post-Implementation Review.</b> This document includes a brief summary of team evaluation of the system functionality, availability and performance.	March 1, 2010
<b>LCFS User Manual.</b> This document describes current available system functionality and reporting within system constraints. It also details functionality not currently available to external users.	March 15, 2010
<b>LCFS system Training Materials.</b> The completion of system user manuals and training materials planned to use during user training sessions.	March 19, 2010

In addition to system development activities, the project includes ARB program milestones, detailed within the project schedule.

#### **D. Purpose of the Project Management Plan (PMP)**

The PMP is a project management tool that defines the project parameters (i.e., scope, objectives, critical success factors, deliverables, high-level schedule, planning assumptions and constraints, and approach) and how the project will be managed (i.e., project governance). FCCC uses the PMP to communicate and set

ARB/client expectations. The PMP includes tools the Project Manager uses to track changes to and their impact on project parameters and governance during the course of the project.

The following is a brief description of PMP components:

- ♦ Project Objectives and Critical Success Factors. Project objectives provide project focus and specific and quantifiable targets for measuring project success. Critical success factors represent conditions that, if not met, would compromise the success of the project.
- ♦ Project Approach. This section discusses the project approach to achieve the project objectives, to include the approach for accomplishing key project activities.
- ♦ Planning Assumptions. It is essential that planning assumptions are clearly defined at project start. Project managers gauge whether assumptions are realized and if not identify, communicate and implement mitigating measures and remedies to ensure the project stays on track. Assumptions may include project time constraints, issue resolution requirements, required resource commitments, client responsibilities, etc.
- ♦ Project team structure and governance. Formal project structure and governance is essential to manage project resources and ensure that project objectives are achieved. Project structure clearly describes the project roles and responsibilities to execute project activities. Timely issue resolution, risk mitigation, and effective project direction are crucial to the quality of project deliverables and adherence to the project schedule. This section describes the project's organizational structure, roles and responsibilities, project communications, decision-making and issue resolution process, deliverables review and approval process, as well as risk mitigation measures.
- ♦ Deliverable Quality Standard. This section describes the purpose and audience for project deliverables, and deliverables content. This summary establishes stakeholder expectations for products FCCC is to deliver during the course of the project and FCCC quality standards for those products.

## **E. High-level Project Schedule**

Exhibit 1 on the following page is a high-level project schedule for the LCFS System Development Project. FCCC maintains a separate detailed project schedule which FCCC shares to report project progress at client status meetings.

## Exhibit 1: High-level Project Schedule

ID	% Complete	Task Name	Duration	Start	Finish	Dec 13, '09	Dec 20, '09	Dec 27, '09	Jan 3, '10	Jan 10, '10	Jan 17, '10	Jan 24, '10	Jan 31, '10	Feb 7, '10	Feb 14, '10	F
1																
2	0%	<b>PROJECT PLANNING</b>	115 days	Mon 12/14/09	Fri 5/21/10											
3	0%	Initiate and Plan Project	3 days	Mon 12/14/09	Wed 12/16/09											
6	0%	Create Project Management Plan (PMP)	19 days	Mon 12/14/09	Thu 1/7/10											
19	0%	Define Detailed Baseline Project Schedule	22 days	Mon 12/14/09	Tue 1/12/10											
26	0%	Execute and Manage the Project	112 days	Thu 12/17/09	Fri 5/21/10											
39																
40	0%	<b>BUILD</b>	27 days	Mon 12/14/09	Tue 1/19/10											
41	0%	XSD Upload Tool build updates	26 days	Mon 12/14/09	Mon 1/18/10											
45	0%	ARB Facing Pages and Report	12 days	Mon 1/4/10	Tue 1/19/10											
48	0%	Unit Testing	21 days	Mon 12/14/09	Mon 1/11/10											
50	0%	LCFS Build Release and Fixes	14 days	Wed 12/30/09	Mon 1/18/10											
58																
59	0%	<b>TEST</b>	35 days	Mon 12/14/09	Fri 1/29/10											
60	0%	Test Planning	22 days	Mon 12/14/09	Tue 1/12/10											
68	0%	System Integration Testing	25 days	Mon 12/28/09	Fri 1/29/10											
97																
98	0%	<b>IMPLEMENTATION</b>	110.5 days	Tue 12/15/09	Tue 5/18/10											
99	0%	Implementation Planning	17 days	Tue 12/15/09	Thu 1/7/10											
112	0%	Pre-Implementation Activities	30 days	Mon 12/21/09	Fri 1/29/10											
174																
175	0%	<b>PRODUCTION ROLL-OUT TASKS</b>	9 days	Wed 1/20/10	Mon 2/1/10											
190																
191	0%	<b>POST-IMPLEMENTATION ACTIVITIES</b>	77 days	Mon 2/1/10	Tue 5/18/10											
290																
291	0%	<b>PROJECT CLOSEOUT</b>	8 days	Tue 3/2/10	Thu 3/11/10											

## II. Project Objectives and Critical Success Factors

### A. Project Objective

Project objectives are specific and measurable targets for accomplishment of the project. The objective of the LCFS System Development Project is to:

- ◆ Provide a secure, web-based data collection application to support regulated parties entry of fuel transaction data to meet ARB LCFS reporting requirements as detailed within the LCFS Guidance Document.

### B. Critical Success Factors

Critical success factors are those criteria that must be met in order to achieve the project objective. The critical success factors for the LCFS System Development Project are as follows:

- ◆ Daily, proactive management of "available" resources.
- ◆ Selection of team members with the correct level of skills to perform and complete project activities, tasks and high quality deliverables within project timelines.
- ◆ Flexibility to manage resources and make changes quickly in resource loading and assignments as necessary for maximum progress and project deliverable quality.
- ◆ Daily access to the ARB Project Manager for project direction, review, approval, and support.
- ◆ FCCC Project Director and team are available for participation in project related meetings.
- ◆ ARB staff are available as needed for project activities.
- ◆ Immediate communication of risks or issues. Escalated issues are handled expeditiously to avoid project delays.
- ◆ Maintenance of project scope. Changes to the project scope and/or schedule will be communicated and agreed to by both ARB and FCCC prior to execution.
- ◆ Deliverables conform to both ARB and state guidelines.
- ◆ Adherence to project timeframes. Deliverables are reviewed and feedback provided on a timely basis in accordance with the project plan.
- ◆ Access to and active participation of ARB project team members and other subject matter experts.
- ◆ Commitment by all parties to execute the activities detailed within the project work plan.
- ◆ No cancellation of scheduled meetings.
- ◆ Project participant positive attitudes and teamwork.



### C. Project Constraints

The project scope, schedule, and resources (cost, staffing, etc.) are key indicators of project constraints. Changes to these project control components may impact the successful completion of the LCFS System Development Project.

As of the date of this PMP, the LCFS System Development Project schedule is constrained because the system deployment date is mandated through regulation. The scope is constrained to the delivery of regulated parties facing pages; the project schedule and ARB requirements for product quality prevents the development of planned additional functionality to provide ARB reporting pages by the February 2010 deployment date. Resources are considered flexible; ARB may amend the contract to accomplish in scope project activities.

#### LCFS Project Trade-Off Matrix

Schedule	Scope	Resources
<b>Constrained</b> (Cannot be changed)	<b>Constrained</b> (Cannot be changed)	<b>Flexible</b> (Can be adjusted)

## III. Project Approach

This section discusses the strategy and approach for completing the LCFS System Development Project. The project includes the following high-level activities:

1. Project Planning – Development of project management document to include a Project Management Plan, Project Schedule, Staff Allocation Plan, and Issues/Risk log. BAC will review draft plans with the FCCC Project Director and the Project Team; final plans will be transmitted to all project participants. Project management documents are used throughout the remainder of the project to ensure the project is on track with timelines, cost, and defined scope. Project management documentation is developed according to Project Management Institute® Project Management Body of Knowledge (PMBOK) standards.
2. System Development – Project team members will draft and follow system development plans for system testing and system implementation, with deliverables detailed above. The FCCC and ARB project subject matter experts will coordinate these activities on a daily basis; the team shall meet at 9:30 a.m. each day to communicate project progress and planned activities.

## IV. Project Structure and Governance

Effective planning and controlled execution based on Project Management Institute (PMI) standards and guidelines serve as the foundation for FCCC's management approach. This section of the PMP describes the project organization structure, roles and responsibilities. In addition, the section details management processes for

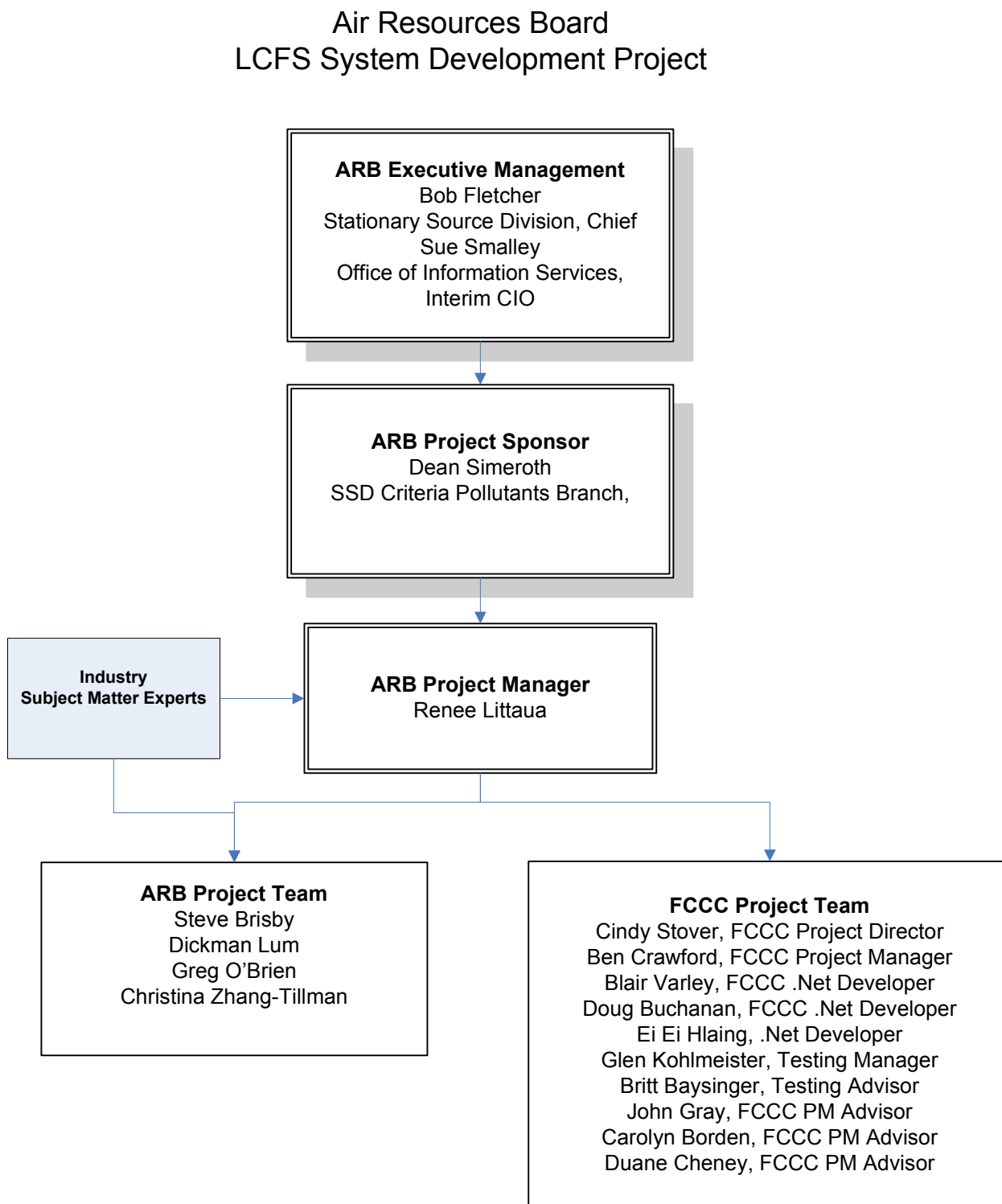
schedule execution, communications and progress reporting, quality assurance, resources management, scope management, deliverables review and approval, and issue/ risk resolution.

#### **A. Project Organization Structure, Roles and Responsibilities**

It is essential that a project structure be established to provide the requisite level of management oversight and direction, scope management, issue identification and resolution, communication, as well as promote organizational ownership. While some project communication can be achieved through informal networks and working relationships, formal structure provides added rigor and establishes responsibility, accountability and ownership necessary for managing the project.

The recommended project structure, as depicted in Exhibit 2 below, for the LCFS System Development Project includes the ARB Executive Management directly supporting the project, ARB Project Sponsor, ARB Project Manager, the ARB project team, the FCCC project team, and subject matter experts.

## Exhibit 2. Project Organization Structure



At the project level, establishing shared expectations and a clear understanding of roles and responsibilities at the start of a project is critical to the overall success of any project. Roles and responsibilities for each of the above identified project stakeholders follow.

### Exhibit 3. Roles and Responsibilities Matrix

Role	Responsibility
ARB Executive Management Bob Fletcher	<ul style="list-style-type: none"> <li>• Attends and actively participates in project status meetings</li> <li>• Provides project direction and guidance</li> <li>• Monitors project progress</li> <li>• Communicates project objectives and status to peers, colleagues, and staff</li> <li>• Reviews draft deliverables and provide input</li> <li>• Provides direction for and supports the prioritization of project recommendations</li> <li>• Directs the resolution of issues and actions to remove project constraints</li> </ul>
ARB Project Sponsor Dean Simeroth	<ul style="list-style-type: none"> <li>• Attends and actively participates in project status meetings</li> <li>• Provides project direction and guidance</li> <li>• Identifies and provide SMEs (subject matter experts) and additional project resources</li> <li>• Monitors project progress</li> <li>• Communicates project objectives and status to peers, colleagues, and staff</li> <li>• Reviews draft deliverables and provide input</li> <li>• Sets priorities for recommendations</li> <li>• Ensures support and buy-in for project recommendations in areas of influence</li> <li>• Assists in the resolution of issues and removal of project constraints</li> <li>• Achieves consensus (80/20) on the approval of recommendations and deliverables</li> </ul>
ARB Project Manager Renee Littaua	<ul style="list-style-type: none"> <li>• Articulates organization requirements for the project and ensures these requirements are met</li> <li>• Champions support for the project and markets its benefits</li> <li>• Grants final approval of Project Management Plan</li> <li>• Plans and coordinates project activities with FCCC Project Team</li> </ul>

Role	Responsibility
	<ul style="list-style-type: none"> <li>• Shares/provides operational knowledge</li> <li>• Facilitates identification and availability of subject matter experts and other resources</li> <li>• Manages the project</li> <li>• Participates in project status/issue meetings and communicates project status to organization directorate</li> <li>• Identifies and elevates issues and risks</li> <li>• Provides direction on alternative strategies to accomplish project goals as risks/issues are identified and addressed</li> <li>• Makes or elevates project-related decisions</li> <li>• Reviews and provides initial approval of project deliverables</li> <li>• Approves deliverables and invoices</li> </ul>
ARB Project Team Steve Brisby Dickman Lum Greg O'Brien Christina Zhang-Tillman	<ul style="list-style-type: none"> <li>• Participate in interviews and/or working sessions</li> <li>• Provide subject specific information as needed</li> <li>• Review and provide input on deliverables</li> <li>• Identify and elevate issues and risks</li> <li>• Assist with project administrative requirements</li> </ul>
Industry Subject Matter Experts TBD	<ul style="list-style-type: none"> <li>• Participate in interviews and/or working sessions</li> <li>• Provide subject specific information as needed</li> <li>• Review and provide input on deliverables as needed</li> </ul>
FCCC Director and Project Manager Cindy Stover	<ul style="list-style-type: none"> <li>• Oversees project activities and represents FCCC to ARB Executive Management, ARB Project Manager, LCFS Project Team and subject matter experts</li> <li>• Assures the professional delivery of all FCCC services, deliverables, and project management</li> <li>• Assists the team in all phases of the project to ensure the full spectrum of ARB needs are understood and met</li> <li>• Performs quality assurance review of all work products prior to delivery to the client</li> <li>• Assists team in securing executive review team alignment for the project deliverables and recommendations</li> <li>• Establishes and maintains project quality</li> <li>• Plans and coordinates project activities</li> <li>• Manages project approach, work plan, timelines,</li> </ul>

Role	Responsibility
	<ul style="list-style-type: none"> <li>scope, and priorities</li> <li>Identifies and elevates issues, risks, and project-related decisions</li> <li>Provides daily management of project staff completion of project activities</li> <li>Oversees and participates in the development of project deliverable components</li> <li>Administers and coordinates contract-related activities</li> </ul>
FCCC IT and PM Advisors John Gray Carolyn Borden Duane Cheney Britt Baysinger	<ul style="list-style-type: none"> <li>Provides project management advise to assist the team completion of quality project deliverables on time</li> <li>Assists team in securing executive review team alignment for the project deliverables and recommendations</li> <li>Provides technical expertise for the development of project products</li> <li>Develops and maintains a detailed project plan tailoring methodology to reflect project needs</li> <li>Leads project status/issue meetings</li> <li>Performs quality assurance review of project products</li> <li>Develops specific products as assigned</li> </ul>
FCCC Development Team Blair Varley Ei Ei Hlaing Jonah Teeter-Balin Ben Crawford Glen Kohlmeister	<ul style="list-style-type: none"> <li>Participate in the development and management of project management plan components</li> <li>Conduct system development activities as planned</li> <li>Conducts system implementation activities as planned</li> <li>Identify and elevate issues, risks, and project-related decisions</li> </ul>

## B. Schedule Management

Exhibit 1 presents a preliminary high-level project schedule. A detailed project schedule (MS Project) includes major activities and tasks by which progress can be measured. On a weekly basis, the FCCC Project Manager updates the project schedule against the schedule baseline and reports on actual work accomplishments in comparison to the baseline or planned work. The FCCC Project

Manager also reports on schedule variances and provides recommendations to address those variances.

### **C. Project Communications**

FCCC recognizes that ongoing and clear communication within the FCCC team and at all levels of the client organization is key to any successful project. It is critical to determine the information and communication needs of project stakeholders and to develop and implement a plan to ensure these needs are met. To ensure effective project communications management, FCCC utilizes the PMBOK methodology, which includes key communications components: communications planning, information distribution, and performance reporting.

Project communications planning and information distribution are detailed in the plan that follows:

## Exhibit 4. Project Communications Plan

Communicator	Message (s)	Recipient (s)	Method	Frequency
<ul style="list-style-type: none"> <li>• ARB Executive Management</li> </ul>	<ul style="list-style-type: none"> <li>• Convey satisfaction or dissatisfaction with project progress</li> <li>• Succinct input on deliverables</li> <li>• Highlight project issues or risks and direct mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>• ARB Project Sponsor</li> <li>• ARB Project Manager</li> <li>• FCCC Project Director</li> <li>• FCCC Project Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Project Status Meetings</li> <li>• Specific deliverable input</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-weekly status meetings</li> <li>• Other ad hoc meetings</li> <li>• Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>• ARB Project Sponsor</li> </ul>	<ul style="list-style-type: none"> <li>• Convey satisfaction or dissatisfaction with project progress</li> <li>• Secure project resources</li> <li>• Succinct input on deliverables</li> <li>• Sets project priorities</li> <li>• Highlight project issues or risks and direct mitigation measures</li> <li>• Share within the organization key milestone accomplishments</li> </ul>	<ul style="list-style-type: none"> <li>• ARB Executive Management</li> <li>• ARB Project Manager</li> <li>• FCCC Project Director</li> <li>• FCCC Project Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Project Status Meetings</li> <li>• Specific deliverable input</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-weekly status meetings</li> <li>• Other ad hoc meetings</li> <li>• Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>• ARB Project Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Convey satisfaction or dissatisfaction with project progress</li> <li>• Communicate resource needs</li> <li>• Provide project direction on Project Team activities and products</li> </ul>	<ul style="list-style-type: none"> <li>• ARB Project Sponsor</li> <li>• FCCC Project Director</li> <li>• FCCC Project Manager</li> <li>• ARB Project</li> </ul>	<ul style="list-style-type: none"> <li>• Project Status Meetings</li> <li>• Ad hoc project meetings</li> <li>• Working sessions</li> <li>• Specific deliverable input</li> </ul>	<ul style="list-style-type: none"> <li>• Daily team stand-up meetings</li> <li>• Weekly team meetings</li> <li>• Bi-weekly status meetings</li> <li>• Ad hoc meetings</li> </ul>



Communicator	Message (s)	Recipient (s)	Method	Frequency
	<ul style="list-style-type: none"> <li>Definitive approval or denial of final draft deliverables</li> <li>Highlight project issues or risks and planned mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>Team</li> <li>Industry Subject Matter Experts</li> <li>FCCC Project Team</li> </ul>	<ul style="list-style-type: none"> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>ARB Project Team</li> </ul>	<ul style="list-style-type: none"> <li>Convey satisfaction or dissatisfaction with project progress</li> <li>Communicate resource needs</li> <li>Participate in project team activities and preparation of draft products</li> <li>Succinct input on deliverables</li> <li>Highlight project issues and risks and suggested mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>ARB Project Manager</li> <li>FCCC Project Manager</li> <li>FCCC Project Team</li> <li>Industry Subject Matter Experts</li> </ul>	<ul style="list-style-type: none"> <li>Project Status meetings</li> <li>Ad hoc project meetings</li> <li>Working sessions</li> <li>Specific deliverable input</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Daily team stand-up meetings</li> <li>Weekly team meetings</li> <li>Bi-weekly status meetings</li> <li>Ad hoc meetings</li> <li>Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>Industry Subject Matter Experts</li> </ul>	<ul style="list-style-type: none"> <li>Communicate availability and other constraints to participation</li> <li>Succinct input on deliverables, as requested</li> </ul>	<ul style="list-style-type: none"> <li>ARB Project Manager</li> <li>FCCC Project Manager</li> <li>ARB Project Team</li> <li>FCCC Project Team</li> </ul>	<ul style="list-style-type: none"> <li>Working sessions</li> <li>Specific deliverable input</li> </ul>	<ul style="list-style-type: none"> <li>Ad hoc meetings</li> <li>Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>FCCC Director</li> </ul>	<ul style="list-style-type: none"> <li>Quality assurance findings from project oversight activities</li> <li>Succinct input on deliverables</li> <li>Highlight project issues and risks and recommended mitigation</li> </ul>	<ul style="list-style-type: none"> <li>ARB Project Manager</li> <li>FCCC Project Manager</li> </ul>	<ul style="list-style-type: none"> <li>Project Status Meetings</li> <li>Ad hoc project meetings</li> <li>Specific</li> </ul>	<ul style="list-style-type: none"> <li>Weekly team meetings</li> <li>Bi-weekly status meetings</li> <li>Ad hoc meetings</li> </ul>

Communicator	Message (s)	Recipient (s)	Method	Frequency
	measures		<ul style="list-style-type: none"> <li>deliverable input</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>FCCC PM Advisors</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate the communication of project progress</li> <li>Advise on resource needs</li> <li>Advise provide project leadership on project team activities and products</li> <li>Succinct input on deliverables</li> <li>Highlight project issues and risks and recommended mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>ARB Project Sponsor</li> <li>FCCC Project Director</li> <li>ARB project Manager</li> <li>FCCC Project Manager</li> <li>ARB Project Team</li> <li>FCCC Project Team</li> </ul>	<ul style="list-style-type: none"> <li>Project Status Meetings</li> <li>Ad hoc project meetings</li> <li>Specific deliverable input</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Daily team stand-up meetings</li> <li>Weekly team meetings</li> <li>Bi-weekly status meetings</li> <li>Ad hoc meetings</li> <li>Specific deliverable review and approval periods</li> </ul>
<ul style="list-style-type: none"> <li>FCCC Project Manager</li> </ul>	<ul style="list-style-type: none"> <li>Convey project progress</li> <li>Communicate resource needs</li> <li>Provide project leadership on project team activities and products</li> <li>Succinct input on deliverables</li> <li>Highlight project issues and risks and recommended mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>ARB Project Sponsor</li> <li>FCCC Project Director</li> <li>ARB project Manager</li> <li>ARB Project Team</li> <li>FCCC Project Team</li> <li>Industry Subject Matter Experts</li> </ul>	<ul style="list-style-type: none"> <li>Project Status meetings</li> <li>Project Status Report</li> <li>Ad hoc project meetings</li> <li>Working sessions</li> <li>Specific deliverable input</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Daily team stand-up meetings</li> <li>Weekly team meetings</li> <li>Bi-weekly status meetings</li> <li>Ad hoc meetings</li> <li>Specific deliverable review and approval periods</li> </ul>

Communicator	Message (s)	Recipient (s)	Method	Frequency
<ul style="list-style-type: none"> <li>FCCC Project Team</li> </ul>	<ul style="list-style-type: none"> <li>Convey satisfaction or dissatisfaction with project progress</li> <li>Communicate resource needs</li> <li>Participate in project team activities and preparation of draft products</li> <li>Develop project deliverables</li> <li>Provide succinct input on deliverables</li> <li>Highlight project issues and risks and suggested mitigation measures</li> </ul>	<ul style="list-style-type: none"> <li>FCCC Project Manager</li> <li>ARB Project Team</li> <li>Industry Subject Matter Experts</li> </ul>	<ul style="list-style-type: none"> <li>Project Status meetings</li> <li>Ad hoc project meetings</li> <li>Working sessions</li> <li>Specific deliverable input</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Daily team stand-up meetings</li> <li>Weekly team meetings</li> <li>Bi-weekly status meetings</li> <li>Ad hoc meetings</li> <li>Specific deliverable review and approval periods</li> </ul>

FCCC regularly revisits this communication plan at client weekly status meetings and may adjust the plan as a result of these meetings at any time during the project.

The FCCC Project Manager reports on the effectiveness of project communications at two levels: regularly scheduled LCFS Project Team weekly meetings, and client bi-weekly project status meetings.

Exhibit 5 presents the template FCCC weekly project status report which summarizes key standing items to review in status meetings to include:

- ♦ Project status in terms of the project being on track, one or more project deliverables or schedule milestones are delayed, significant delays
- ♦ Key project milestones and status as not yet started, in progress or complete
- ♦ Reporting period activities and their status as in progress or complete
- ♦ Project activities planned within the next reporting period
- ♦ Project issues/concerns presented with recommendation(s) and alternatives if applicable

## Exhibit 5. Weekly Status Report

### Foundation for California Community Colleges LCFS System Development Project Status Report

Team Members: [Enter team member names]

Project Schedule: XX/XX/XX – XX/XX/XX

Reporting Period: XX/XX/XX – XX/XX/XX [Enter the current reporting period]

Budgeted Hours: Actual Hours / % of Total:

Project Status: [Enter project status and any impacts to PM schedule, cost, scope, resources, quality, etc.]

- On Track
- Recoverable Delay; and/or Temporary Resource Challenge; and/or Budget Risk [Enter description of current project status and schedule impacts (e.g., potential or imminent) if any from that status.]
- Schedule Change; and/or New Resource Requirement(s); and/or Budget Issue

#### PROJECT MILESTONES:

DELIVERABLE?	MILESTONE	*DUE DATE	**STATUS
Y / N	[Enter milestone title]	XX/XX/XX	[Enter status]

\*Highlight if new or changes

\*\*Not started, In Progress, Complete

#### REPORTING PERIOD ACTIVITIES:

ACTIVITIES	*STATUS
<ul style="list-style-type: none"> <li>[Enter description of activity started and either in progress or complete]</li> <li>[Enter description of activity started and either in progress or complete]</li> <li>[Enter description of activity started and either in progress or complete]</li> </ul>	[Enter status]

\* Complete, In Progress

#### ACTIVITIES PLANNED NEXT REPORT PERIOD:

- [Enter activity description].
- [Enter activity description].

#### ISSUES/CONCERNS:

- [Describe current issues and concerns].
- [Describe current issues and concerns].

#### FCCC INTERNAL REPORTING – OTHER CONCERNS:

- [Describe current issues and concerns].

#### **D. Quality Management**

Quality management is an integral component of FCCC's project delivery. Its primary purpose is to ensure project teams consistently deliver high-quality products that meet client needs. Without a specific focus on measurable quality, results can vary across project activities and deliverables. Therefore, quality management activities focus on defining and measuring progress toward achieving the project's objectives.

FCCC quality management results from a tiered quality approach. Quality initiates at the FCCC team level with the production of quality deliverables and through regular and thoughtful communication with the client. The FCCC Project Manager forms the second quality tier through client interactions and careful review of all project deliverables. The FCCC Project Director provides oversight of project management and deliverables production, and conducts a quality review of all deliverables prior to delivery to the client as final.

#### **E. Resources Management**

Successful project resources management hinges on careful initial planning and development of a staffing plan.

The project's success depends on the quality of the project team members and the level of stakeholder participation. The skills and level of participation required to organize and perform the work and to provide input can vary over the course of the project. The project may require additional or different resources from those anticipated at its inception. To ensure completion of project deliverables, FCCC creates and later updates as needed a staffing plan. The staffing plan ensures that the appropriate client and FCCC resources are available and/or have been assigned to specific project work activities, according to the roles and responsibilities and reporting relationships defined in Section V.A. Project Organization Structure, Roles and Responsibilities.

FCCC monitors staff worked hours to ensure the project concludes within the estimated baseline cost. FCCC reports on staff hours used within written weekly project status reports.

Exhibit 6. presents the LCFS System Development Project Staffing Plan with estimated resource requirements.

## Exhibit 6. LCFS System Development Staffing Plan

See LCFS Staff Forecast 122409 Update w-Costs.xls

### F. Scope Management

PMP Section I.B. describes the scope of the LCFS System Development Project. Upon project execution, the FCCC Project Manager carefully manages the scope to ensure that the work performed is in scope, correct and complete, and to minimize scope changes. The use of a detailed project schedule, which includes individual project activities and tasks, facilitates scope management.

Scope changes may occur due to an external event such as a legislative mandate, value-added changes, business process changes, or an error or omission in the project scope definition. In the event the scope must change, the FCCC Project Manager documents changes to project scope and planning assumptions, and submits this documentation to the ARB Project Manager for review. The documentation describes the potential changes to the project, assesses the impact of the changes to the current work plan, and reviews alternatives to the scope changes (if applicable). Upon approval of the change by the ARB Project Manager, FCCC submits an amendment to the Statement of Work and updates the project schedule, PMP and other documentation.

### G. Deliverable Review and Approval

Each project deliverable, as listed below, receives targeted review and approval by the ARB Project Manager. Reviews focus on accuracy of content. Exhibit 6 provides a list of project deliverables and assigned reviewers. See the project detailed work plan for deliverable review timelines.

#### Deliverable Reviewers

LCFS Team	ARB Project Team; FCCC Development Team
FCCC PM and IT Advisors	John Gray, Carolyn Borden, Duane Cheney, Britt Baysinger
FCCC .Net Developers	Blair Varley, Ei Ei Hlaing, Doug Buchanan, Glen Kohlmeister
ARB SMEs	Steve Brisby, Dickman Lum, Greg O'Brien, Christina Zhang-Tillman
OIS	Sue Smalley, Nate Black
ARB Project Manager	Renee Littaua
FCCC Project Director, Project Manager	Cindy Stover; Ben Crawford

## Exhibit 6: Project Deliverables Review

Deliverable	Target Reviewers	ARB / FCCC Management Review
Project Management Plan	LCFS Project Team	ARB Project Manager FCCC Project Director
Implementation Plan	LCFS Project Team OIS	ARB Project Manager FCCC Project Director
Test Plan	PM and IT Advisors .NET developers ARB SMEs	ARB Project Manager FCCC Project Director
Test Scripts	PM and IT Advisors .NET developers ARB SMEs	ARB Project Manager FCCC Project Director
Hardware Installation and Configuration	IT Advisors .NET developers ARB SMEs OIS	ARB Project Manager FCCC Project Director
System Backup	IT Advisors .NET developers ARB SMEs OIS	ARB Project Manager FCCC Project Director
Configuration Management	IT Advisors .NET developers ARB SMEs OIS	ARB Project Manager FCCC Project Director
LCFS Reporting Tool Working Group Meeting System Demonstration	PM and IT Advisors ARB SMEs	ARB Project Manager FCCC Project Director
Help Desk Procedures	PM and IT Advisors ARB SMEs OIS	ARB Project Manager FCCC Project Director
User Acceptance Testing	PM and IT Advisors ARB SMEs OIS	ARB Project Manager FCCC Project Director
System Deployment	LCFS Project Team	ARB Project Manager FCCC Project Director



Deliverable	Target Reviewers	ARB / FCCC Management Review
Training Plan	PM Advisors ARB SMEs	ARB Project Manager FCCC Project Director
Post-Implementation Review	LCFS Project Team	ARB Project Manager FCCC Project Director
User Manual	ARB SMEs	ARB Project Manager FCCC Project Director
Training Materials	PM Advisors ARB SMEs	ARB Project Manager FCCC Project Director

FCCC carefully controls deliverable document naming conventions and versions to ensure accurate tracking of documents from development to publication and storage. The FCCC Project Manager assumes or delegates the role of document manager, establishes appropriate new document guidelines and facilitates the application of these guidelines to each relevant document. The document manager conducts routine audits to ensure project documentation is properly stored, controlled and naming conventions are appropriate.

## H. Risk Management

A risk is a potential threat to the objectives of the project, including the ability to achieve the business results expected, as well as to manage the project schedule and cost. Risks can arise from a wide range of sources, including an inadequate number of people with the right skills on the project; organizational resistance; and unexpected complexities. These risks ebb and flow during the course of a project.

Risk management is the process of identifying events or situations that can impact a project's ability to achieve stated goals, objectives, or expectations (e.g., scope, budget, schedule), and developing strategies to avoid or minimize the impact of risks.

An issue is realized risk. Issues are questions or problems experienced throughout the course of any project requiring debate, analysis, and decisions from one or more parties in order to be resolved. Many issues can adversely impact the project and/or schedule if they are not resolved properly and in a timely fashion. For this reason, issue management is a critical component of a project management approach.

Our approach to risk management consists of five key tasks:

1. Define measures of success and performance targets (e.g., deliverable content and timelines, key project milestones).
2. Identify and analyze risks that threaten our ability to achieve these success and performance targets. This includes determining the probability of a risk

occurring, the impact or amount at stake if a risk occurs, and the potential timing or frequency of the risk event.

3. Develop a mitigation strategy for each risk (e.g., avoidance, mitigation, acceptance, transference).
4. Log each risk and the identified mitigation strategies, the team member assigned to the risk for management and tracking, the date of the assignment, and risk priority.
5. Monitor and report on risks. During monitoring the Project Manager ensures risks plans are executed, monitors the impact of implemented risk strategies, and looks for risk triggers and new risks resulting from a known risk. As new risks are identified, the project team develops a new risk response, and takes timely appropriate corrective action.

Our approach to issue management consists of the following key tasks:

1. Identify and log an issue.
2. Review and assign the issue to the appropriate team member(s) for analysis and resolution. Log the details of this assignment, including due date and issue priority.
3. Analyze and resolve, or escalate the issue. The Issue Assignee(s) researches the issue, explores options, seeks a consensus, and makes a recommendation. This analysis may result in documentation of the issue resolution, escalation of the issue to client management, reassignment of the issue to a more appropriate owner, or issue closure.
4. Monitor the status of open issues. On a regular basis, the Project Manager reviews the list of open issues with the client at scheduled status meetings. The Project Manager discusses progress with the Issue Assignee to ensure that appropriate and timely progress is being made toward issue resolution.

Exhibit 7. presents a log which combines the tracking of both risks and issues.

## Exhibit 7. LCFS Project Risk and Issue Management Plan and Log

### ARB LCFS Issues and Risk Tracking Log

Last updated: 12/29/2009

ID No.	Date Opened	Category	Risk/Issue Description	Probability /Impact	Priority	Risk/Issue Response & Mitigation Strategy	Progress / Resolution	Owner	Proposed Resolution Date	Actual Resolution Date
1	00/00/0000	Risk			High		Mitigation in Progress	Cindy Stover	00/00/0000	00/00/0000
2	00/00/0000	Risk			Medium		Mitigation in Progress		00/00/0000	00/00/0000
3	00/00/0000	Issue			Medium		Not Started		00/00/0000	00/00/0000